

1	THERMAL CALIBRATION SYSTEM	30	.By differential temperature measurement along undisturbed thermal gradient
2	.By thermal radiation emitting device (e.g., blackbody cavity)	31	CALORIMETRY
3	.By immersion in liquid having controlled temperature	32	.Total radiant energy or power measurement
4	LEAK OR FLAW DETECTION	33	.With control of heat added to or lost from a sample container (e.g., isothermal calorimetry)
5	.With heating or cooling of specimen for test	34	..With controlled adiabatic shield
6	DISTANCE OR ANGLE	35	.Heat absorbing high temperature gas probe (e.g., enthalpy or fluid cooled probe)
7	.Thickness, erosion, or deposition	36	.Heat value of combustion (e.g., 'calorific value')
8	FLAMMABILITY TESTING	37	..Having specified control of input of mixture
9	EMISSION DETERMINATION	38	..Having bomb or cartridge ignition chamber
10	DIFFERENTIAL THERMAL ANALYSIS	39	.Gain or loss of heat by heat utilizing load in path of heat exchange fluid
11	.Detail of electrical heating control	40	..Determined by combining flow rate and temperature signals of heat exchange fluid
12	.Detail of sample holder or support therefor	41	...Signals combined electrically
13	..Formed by thermoelectric element	42	.Throttling calorimeter (e.g., steam quality)
14	THERMAL GRAVIMETRIC ANALYSIS	43	DETERMINATION OF INHERENT THERMAL PROPERTY (E.G., HEAT FLOW COEFFICIENT)
15	BY APPLYING KNOWN THERMAL GRADIENT (E.G., INDICATION OF RESPONSE BY LOCATION)	44	.Thermal conductivity
16	TRANSFORMATION POINT DETERMINATION (E.G., DEW POINT, BOILING POINT)	45	THERMAL TESTING OF A NONTHERMAL QUANTITY
17	.By change in optical property (e.g., transmission)	46	.With loading of specimen (e.g., stress or strain)
18	..By reflection (e.g., polished surface)	47	..Cyclic
19	...Sensed by instrument (e.g., photocell)	48	...Torsional
20	....Controlling heating or cooling	49	..Tensile
21	.By electrical condition of specimen	50	...With detail of heating or cooling structure
22	.By change in motion of movable element	51	..Compressional
23	..Driven element	52	..Bending or flexing
24	.By change in pressure of flow rate	53	.Of cure or hardenability
25	.By thermal arrest (e.g., time-temperature curve)	54	.Of fluid volume
26	..Of molten metal (e.g., carbon content)	55	.Expansion or contraction characteristics (e.g., dilatometry)
27	.Between gaseous and liquid states	56	..Including electrical sensor
28	..Dew point	57	.Of susceptibility to thermally induced deterioration, flaw, or failure
29	HEAT FLUX MEASUREMENT		

100	TEMPERATURE MEASUREMENT (E.G., THERMOMETER)	127	...Having significant frequency limitation or relationship (e.g., peak, ratio)
101	.Composite temperature-related parameter	128	...Having significant signal handling circuitry (e.g., linearizing, emissivity compensation)
102	..Time-temperature relationship (e.g., integral, deterioration, change)	129	...Comparison with radiation reference standard
103	...Time-temperature integration performed by particular circuit arrangement	130	...Optical system structure (e.g., lens)
104	...Peak (maximum or minimum) with respect to time	131	...With radiation conducting element
105	....Indicating tube with sensing material return prevention	132	...Sensor or mounting temperature control
106	....Permanent visual indication (i.e., irreversible)	133	...Ambient temperature compensated (e.g., dummy sensor)
107	...Rate of change	134	..Extrapolation (e.g., simulation, heat flow)
108	...Degree-days	135	..By fluid flow within or to sensor (e.g., convection, heat transfer, differential pressure)
109	..Climate related (e.g., wind-chill factor, discomfort index)	136	.Geophysical (e.g., well bore, underwater)
110	..Plural spaced temperature function	137	.Temperature distribution or profile
111	...Highest or lowest of spaced temperatures	138	.With fluid flow deflector
112	...Difference or gradient	139	.Of molten metal
113	....By thermoelements connected in series opposition	140	..Lance (e.g., consumable)
114	....By current modifying elements in circuit (e.g., bridge)	141	.Combined with diverse art device
115	...Space average	142	..With other measuring device
116	..By single sensor (e.g., elongate or with plural fluid intakes)	143	...Pressure
117	.By a vibratory effect (e.g., resonant frequency, acoustical)	144	..With combustion engine
118	..Resonant frequency by fluid flow	145	...Cooling system
119	..Vibration velocity (e.g., echo timing)	146	....Radiator cap mounted thermometer
120	.In spaced noncontact relationship to specimen	147	..With fluid carrying conduit (e.g., shower pipe)
121	..By thermally emitted radiation	148	...Sensor within conduit
122	...By microwave arrangement	149	..With cooking compartment or door thereof (e.g., oven)
123	...Transparent material measurement or compensation (e.g., spectral line, gas, particulate suspension)	150	..With bottle (e.g., nursing)
124	...With scanning or temperature distribution display	151	..With confection or infant pacifier
125	...With fluid flow purging device	152	..With electrical component (e.g., transformer)
126	...Having emissivity compensating or specified radiating surface	153	..With roll or rotary specimen or support
		154	...With coupling between rotating sensor and stationary electrical circuitry
		155	..With piercing element

156	..With float	186	.With specified recording arrangement
157	..With sampling cup	187	.Mechanical (e.g., expansion or contraction of materials)
158	.With removable cover for sensor (e.g., disposable sheath)	188	..Having electrical indication
159	.Nonelectrical, nonmagnetic, or nonmechanical temperature responsive property	189	..Plural zones (e.g., indoor-outdoor)
160	..Melting or softening	190	..Indicating tube type
161	..Change of optical property	191	...With optical element (e.g., magnifying)
162	...Color	192	...With holder for shaking
163	.By electrical or magnetic heat sensor	193	...Having specified cross section
164	..With preheated sensing probe	194	...With support or housing
165	..With heat exchanger or conductor	195	..With detail of motion transmitting mechanism
166	..At plural zones	196	..One sensing element within another
167	...Scanning	197	..With compensation
168	..With self-rebalancing arrangement (e.g., servo-potentiometer, thermal link)	198	..With adjustment
169	..With thermal lag compensation	199	...Mechanical loading of sensor
170	..Digital output	200	...Adjustment of limit stop
171	...With digital linearizing circuitry	201	..Expanding fluid
172	..With compensation for sensor nonlinearity or lead impedance	202	...With distinct pressure transmitting fluid
173	...By feedback in amplifier circuit or with constant current source in circuit	203	...Bourdon tube or bellows
174	..By conductive fluid or work function within sensor (e.g., ionization)	204	..Multiple distinct sensing elements
175	..Thermal noise generated in conductor	205	..Compound sensing element (e.g., bimetallic)
176	..Including sensor having hysteresis or cryogenic property (e.g., ferromagnetism, superconductivity)	206	...Coil
177	...Ferroelectric	207	...Helix
178	..By barrier layer sensing element (e.g., semiconductor junction)	208	HOUSING, SUPPORT, OR ADJUNCT
179	..By thermoelectric potential generator (e.g., thermocouple)	209	.Removable probe cover
180	...Specimen is part of thermoelectric circuit	210	MISCELLANEOUS
181	...Reference junction compensation		
182	...Reference junction temperature control		
183	..By current modifying sensor		
184	...Reactive element (e.g., capacitive)		
185	...Detail of resistive sensor		

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